DOS Documentation Project (DOSDP)

Readme

This project aims to provide editable source documents (.odt files, generated by LibreOffice or other text processors) and/or fully structured read-only documents (e.g. PDF) of the online references, help files, and additional support material for the *Disk Operating System (DOS) for "IBM-compatible" Personal Computers* (PC). The DOS issues, versions, or products for this project are

- Microsoft DOS version 6.22 (**MS-DOS v6.22**),
- IBM Personal Computer DOS version 7 or "2000" (**PC DOS 7/2000**), and
- the replacement command processor 4DOS ("Free **4DOS v8.00**").

Why?

Providing editable source files of online help documents seems to be unnecessary since the content is available - a user can view help file or reference content at any time while running a DOS session. But there are two (main) reasons why separate and accessible documents of that content should be available to a user:

1. Reference / Help content should be available separately from the use of an operating system
2. Online Reference / Help content is not editable (and should not be altered) - but user-added content to the reference/help material should be possible

This is also the reason why available content on internet resources is not sufficient - it is not user editable (and it should not be) and it is not locally available on a system.

Why DOS?

One reason is that even "today" (whenever that "today" may be) DOS systems are still in use. Separately available reference material may help to maintain those running systems.

Another reason is that there is - for many different intentions - a need to run applications (of any kind) that require DOS systems. This will often be solved by using *Virtual Machines* (VM) or specific *Emulators* that are able to run DOS systems which can then run the wanted application. It is sometimes helpful to have reference material at hand to set those applications up and get them running.

And then there may be just "historical" or personal interests...

Why MS-/PC DOS? Why not DR-DOS, ROM-Dos, FreeDOS ...?

While it is true that "alternate" DOS issues have specific features beyond the "traditional" MS-/PC DOS versions, it is also true that MS-/PC DOS defined the standards of DOS systems. "Alternate" DOS systems must adhere to those standards or DOS applications won't run on that systems. This means that MS-/PC DOS is the basis for everything else in the "DOS world".

FreeDOS is a "special" case: it already has editable help files and reference material, although - depending on a personal viewpoint - most of that material could be judged as generally insufficient or at least not as user-friendly as possible.

(Of course it would be most welcome when anyone with material at hand could add other DOS issues to the project!)

Why MS- AND PC DOS?

Microsoft as software producer and IBM as hardware manufacturer and system integrator had always different intentions and interests regarding the PC market and DOS. There were always subtle (and not so subtle) differences in the MS- and PC DOS versions. This is specifically true for the "last" "traditional" DOS version when Microsoft and IBM had parted ways. It is a matter of personal taste and needs which DOS issue a user may choose to use - of course a "mix" of the issues under a chosen kernel will be a quite regular choice (for example to have both interpreter / help systems available).

Why v6.22 and v7/2000? Why not v5x, v3.2, ...?

Within just 10 "wild" years, from 1981 to 1991, from DOS v1 to DOS v5/Windows 3.1 and/or OS/2 v2.11 ...

- the "PC market" went from 8-bit "Home Computers" to mass-produced 386 processors
- from a niche market to billions of installed and running PC
- from terminal-like monochrome character displays to "Super-VGA" cards connected to LCD- or Plasma-Displays
- from a few KB system memory to several Megabyte-systems as a standard
- from zero hard drive disks to mass-produced Gigabyte drives in every end user PC
- from Cassette tape external storage to optical disk drives
- from 9-pin line printers (if at all) to (early) Color Laser postscript printers as possible end user devices
- ... and many more radical market changes regarding "personal" IT hard-/software.

DOS was designed and used as a "simple" operating system, mainly used as a "program starter" (no regular user has any real interest in the operating system; a user wants to work with applications). But those changes mentioned above made an "evolution" of the operating system necessary - mostly because of user and hardware demands. While the v6.x or v7/2000 versions of MS-/PC DOS can be seen as "convenience" issues to round up DOS issues before the "next step" (graphical UI, multi-tasking, 32/64-bit...) the "last" real "evolutionary" DOS version was v5 which was designed specifically for Windows v3.x support (i.e. 386 processors).

When a DOS system has to be used then the version should reflect this "evolution". Without a **very** specific need it is just reasonable to use the last "tradional" DOS version (excluding the DOS subsystems in Windows 95x, 98, ME, "32" - i.e. Windows NT / 2000 / XP / Vista / 7). Some commonly used DOS commands (e.g. MOVE or DELTREE) are only available since MS-/PC DOS 6.x and later.

DOS Enhancements

The designed, advertised, and sold "DOS Enhancement" was Windows v3.0 / v3.1 / v3.11. From 1990 onwards nearly all produced PC for end user markets were sold as DOS/Win3.x systems, preconfigured for Windows.

But the "real" DOS enhancement was a Shareware product - 4DOS [https://4dos.info] from JP Software. When a DOS system is used "today" the most valuable enhancement is to replace DOS' COMMAND.COM with the 4DOS command processor. Even when not one of the many specific features of 4DOS will be used any DOS system will profit from that replacement in a general way (for example regarding the type and speed of swapping the transient portion of the command processor).

The PC market "explosion" led to the development of an enormous amount of commercial, shareware, freeware, and public-domain software products for DOS(/Win3.x). Most of those products are still available on internet resources and may enhance the use of DOS.

The long running FreeDOS project provides support for all DOS systems (beside their own FreeDOS operating system). This is especially true for device drivers of all kinds (e.g. USB support which was never available in "traditional" DOS issues).

Environment for DOS Systems

Probably the "best" environment for a DOS system is the hardware of the "DOS years" (e.g. a 80386[SX] board, perhaps with a numeric copressor, a VESA local bus, something like a TSENG ET4000 graphic chip, 16MB memory, and the like...). Such systems are called "Vintage" computers and are still on sale.

Realistically the "best" environment for a DOS system is a *Virtual Machine* (or *Emulator*) that supports all DOS functions. It is not possible to tell which of the many possible software packages is the "best" solution - that depends on the taste and needs of a user.

In a way the "best" environment for DOS systems would be its planned/designed successor operating system: OS/2. It was advertised as "*better DOS than DOS*" and "*better Windows [v3.x] than Windows*" and, to a certain extent, this was/is a true statement - OS/2 was designed and programmed to support DOS and/or Win3.x sessions in a kind of "optimal" way. The problem here is that OS/2 itself is a "dead" OS and not supported (with VM "Additions") by any "todays" VM. As far as it is known the last VM with (working) support for OS/2 (and therefore also its *Virtual DOS Machines* [VDM] and WinOS2) is Microsoft's *Virtual PC for Windows 7*. (Note: OS/2 is still sold and - to a degree - maintained under a different branding like ArcaOS - those issues may include issue specific VM additions.)

Some user developed VM additions for DOS systems exist for several VM. They provide "shared folders" and better mouse integration (for example see: vbados on git). Some drivers from the FreeDOS project may help to provide (better) support for disks (also CD/DVD).

The specific application genre "DOS games" can only be addressed by emulator software. The long running project DOSBox (and/or its forks) may help to play old DOS games on "todays" systems.

Project Structure / Files

The project files are available as a single zip file (it is possible to obtain individual files on the *Internet Archive* by using "Show All", selecting the zip file and using the command "View Contents").

File structure:

```
DOSDP Readme.odt
DOSDP Readme.pdf (this file)
4DOS
     4DOC750A.odt
     4DOC750B.odt
     4DOC750C.odt
     4DOC800.pdf
     readme.txt
MS-DOS 6.22
     MS-DOS 6.22 - Online Help.odt
     MS-DOS 6.22 - Online Help.pdf
     QBasic - Help Content.odt
     QBasic - Help Content.pdf
     additions
          HELPMAKE.EXE
          MS-DOS 6 - Users Guide.pdf (added for convenience from an Internet Archive
                                      resource)
PC-DOS 7-2000
     PCDOS CmdRef.odt
     PCDOS CmdRef.pdf
     PCDOS-REXX.odt
     PCDOS-REXX.pdf
     additional doc
          Daney - Common REXX Pitfalls (1995).pdf
          OS2-OREXX.INF
          PC DOS 7 Keyboards and Code Pages (german).pdf
          PC DOS 7 Technical Update.pdf   (added for convenience from an Internet
                                           Archive resource)
          PC DOS 7 Users Guide.pdf   (added for convenience from an Internet Archive
                                      resource)
          PCDOS DOSERROR.odt
          PCDOS DOSERROR.pdf
          TRL2.pdf
     helpers
          (several small programs as DOS or REXX additions including readmes)
          386
               (several small programs as DOS or REXX additions, 386 code)
```